



Fact sheet

Brown Marmorated Stink Bug — A New Exotic Insect in New Jersey

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The Brown Marmorated Stink Bug, *Halyomorpha halys* (Stål), is an exotic insect belonging to the order Hemiptera or true bugs. *Halyomorpha halys*, sometimes also called the yellow-brown stink bug or East Asian stink bug, is native to Asia and is considered an important agricultural pest in Japan where it attacks soybeans and various tree crops.

It was first collected in the United States just across the Delaware River in Allentown, PA during the fall of 1996. Since then its presence has been confirmed in Lehigh, Northampton, Monroe and Pike Counties in Pennsylvania. In 1999 the brown marmorated stink bug was first recovered in New Jersey from a black light trap run by the Rutgers Cooperative Extension (RCE) Vegetable IPM program in Milford, NJ. In 2002, it was again collected from blacklight traps located in Phillipsburg and Little York, NJ and found on plant material in Stewartsville, NJ. A specimen was also brought into the Morris County Cooperative Extension office in 2002 by a homeowner who lives in southeastern Morris County.

Description

The eggs are elliptical (1.6 x 1.3 mm) and light green in color. They are deposited in a cluster of 20 to 30 eggs on the underside of leaves.



Fifth Instar

Immatures go through five nymphal instars and range in size from 2.4 mm in the first instar to 12 mm in length during the final instar. Immatures are characterized by dark red eyes and an abdomen that is yellowish-red in the first instar. In later instars the abdomen gradually turns to off-white with reddish spots.

Adults are approximately 17 mm long, generally brown in color with characteristic whitish antennal segments and darker bands on the membranous, overlapping part, at the rear of the wings. They also have patches of coppery or bluish metallic-colored punctures on the head and pronotum. Scent glands are located on the dorsal surface of the abdomen and the underside of the thorax. These glands are responsible for producing the pungent odor that characterizes "stink bugs."





Male

Female

Damage

The brown marmorated stink bug is a sucking insect that uses its proboscis to pierce the host plant in order to feed. This feeding results, in part, in the formation of small, necrotic areas on the outer surface of fruits and leaves of its hosts causing characteristic cat-facing injury in fruits such as apples and peaches. In its native range, *H. halys* feeds on a variety of fruits and other host plants including apples, cherry, citrus, figs, mulberry, peach, pear, persimmon, and soybeans.

In Pennsylvania, *H. halys* has been observed feeding on many ornamental plants and trees including crab apple, Norway maple, pyracantha, American holly, and butterfly bush in 2003. The stink bug has also been observed feeding on peaches, Asian pears, string beans, asparagus, and raspberries. It is uncertain if *H. halys* will become a widespread pest in the eastern United States.

Adults also exhibit behavior similar to Asian ladybird beetles and boxelder bugs and can congregate on houses in late fall and eventually move indoors. Once inside they can become a nuisance and emit an offensive odor if crushed. Chemical control recommendations are not currently available. Your best option is to vacuum up the insects and release them outdoors or dispose of the vacuum bag. Caulking windows and doors, etc., in areas where the insect congregates on the outside of the house or structure, should help prevent them from entering.

Incidence Reports

The Rutgers Cooperative Extension and the New Jersey Department of Agriculture are concerned with the further distribution of this insect into the state and would appreciate your help. If during late September and early October you observe large numbers of brown stink bugs congregating on the side of your house or other structures or inside your home please call your local county Cooperative Extension office or the New Jersey Department of Agriculture to report the infestation.

If possible, collect a couple of specimens in a vial filled with alcohol. Take them to your local county Cooperative Extension office for identification or send to the Rutgers Diagnostic Laboratory at Rutgers University. Submission information for insect identification by the laboratory can be located at <http://www.rce.rutgers.edu/plantdiagnosticlab/default.asp>. Either action will be of help to follow the spread of this new exotic insect.

Literature Cited

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